

REMARKS

In view of the above amendments and the following remarks, reconsideration of the rejections and further examination are requested. Upon entry of this amendment, claims 1 and 11 are amended, leaving claims 1, 4, 11 and 15-19 pending with claims 1 and 11 being independent. No new matter has been added.

Rejections Under 35 U.S.C. §103(a)

Claims 1, 11, 18 and 19 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Yamamoto (JP 2003-184994) in view of Takeda (US 4,968,292).

Applicants submit that the claims as now pending are allowable over the cited art. Specifically, amended independent claim 1 recites a rotating assembly comprising a shaft having an insertion portion, the insertion portion having an outer diameter and an outer circumferential surface, the outer circumferential surface including first portions and second portions adjacent the first portions, the first portions being deformable so as to be raised outward when a force is applied to the second portions, and a rotating member having an inner hole with first and second large-diameter escape portions in the inner hole, the first and second large-diameter escape portions extending in a circumferential direction of the inner hole for at least a length equal to a circumferential length of two adjacent grooves of a plurality of grooves, wherein the inner walls press the second portions of the outer circumferential surface such that the first portions are raised and inserted in the grooves so that the rotating member is fixed to the shaft, and wherein the first and second large-diameter escape portions are disposed radially inward of the first and second locations, respectively, so that and the first and second large-diameter escape portions are radially opposed to each other, and the first and second large-diameter escape portions are configured to prevent contact with the outer circumferential surface of the shaft when the rotating member is fixed to the shaft.

The cited art fails to disclose or render obvious such a rotating assembly. In particular, the Examiner cites Yamamoto as disclosing one of the inner hole and the outer circumferential surface of a shaft having a plurality of grooves that presses and raises the other of the inner hole and the outer circumferential surface of a shaft. However, as is clear in Yamamoto, Yamamoto fails to disclose that that first portions are deformable so as to be raised outward when a force is applied to second portions, and that inner walls press the second portions of the outer

circumferential surface such that first portions are raised and inserted in the grooves so that the rotating member is fixed to the shaft, as required by claim 1 of the present invention.

Moreover, the Examiner recognizes that Yamamoto fails to disclose escape portions. For this element, the Examiner relies on Takada. However, at best, Takada discloses concave portions 41 that are positioned in three equally spaced positions. Therefore, Takada fails to disclose first and second large-diameter escape portions that are radially opposed to each other, and the first and second large-diameter escape portions are configured to prevent contact with the outer circumferential surface of the shaft when the rotating member is fixed to the shaft, as required by claim 1 of this application.

Moreover, there is no reasoning in the prior art to modify either Yamamoto or Takada such that the combination thereof would have rendered independent claim 1 obvious. Therefore, Applicants submit that independent claim 1 and its dependent claims are allowable over the cited art.

Applicants submit that independent claim 11 and its dependent claims are allowable over the cited art. Specifically, the cited art fails to disclose or render obvious a rotating assembly comprising a shaft having an insertion portion, the insertion portion having an outer diameter and an outer circumferential surface, the outer circumferential surface including first portions and second portions adjacent the first portions, the first portions being deformable so as to be raised outward when a force is applied to the second portions, wherein the inner walls press the second portions of the outer circumferential surface such that the first portions are raised and inserted into the plurality of grooves so that the inner hole is fixed to the outer circumferential surface of the insertion portion, and wherein first and second large-diameter escape portions are disposed in the inner hole inward of the first and second locations, respectively, and the first and second large-diameter escape portions are radially opposed to one another and configured to prevent contact with the outer circumferential surface of the shaft when the rotating member is fixed to the shaft, as recited by claims 11.

Claims 4 and 15 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Yamamoto in view of Takeda, as applied to claims 1, 11, 18 and 19, and further in view of Arnold et al. (US 5,207,120).

Applicants submit that each of these claims is allowable over the cited art for the reasons

set forth above, since claims 4 and 15 are dependent from claims 1 and 11, respectively, and since Arnold fails to overcome the deficiencies of Takada and Yamamoto.

Withdrawn Claims 16 and 17

Applicants respectfully request that claims 16 and 17 be rejoined if claim 11 is determined to be allowable, since each of these claims would depend from or otherwise require all the limitations of an allowable claim. *See* MPEP 821.04.

Conclusion

In view of the foregoing amendments and remarks, all of the claims now pending in this application are believed to be in condition for allowance. Reconsideration and favorable action are respectfully solicited.

Should the Examiner believe there are any remaining issues that must be resolved before this application can be allowed, it is respectfully requested that the Examiner contact the undersigned by telephone in order to resolve such issues.

Respectfully submitted,

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/Jeffrey J. Howell/

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